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**MUTUAL INFLUENCE OF MORAL VALUES, MENTAL MODELS AND
SOCIAL DYNAMICS ON INTERGROUP CONFLICT**

SCOTT ATRAN

ARTIS RESEARCH & RISK MODELING

10/10/2013

Final Report

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ARTIS Research

AFOSR – Mutual Influence Research Summary

May 2010 to April 2013 (preceded by May 2009 to April 2010 project)

Principal Investigator: Scott Atran. Co-PIs: Doug Medin, Jeremy Ginges and Richard Davis.

- 7 recent high-level briefings (by invitation)
- 12 Published Books/Chapters
- 22 Authored Journal Articles
- 15 Authored Press Articles
- 16 Academic Presentations
- 21 Press Articles about Research Efforts
- 18 Radio/Television Interviews with Researchers
- In total, 6 graduate students and 2 Post-docs worked on project

Countries: Chile, Guatemala, Israel, and Palestinian Territories.

General Description of Accomplishments

Main findings of our research: We have provided empirical support from real-world conflict areas for several ways in which devoted actors driven by sacred values deviate from rational actors in their willingness to sacrifice self-interest, including (1) violation of transitivity in preferences, (2) insensitivity or reverse sensitivity to quantity, (3) immunity to tradeoffs coupled with a “backfire effect,” where offers of material incentives or disincentives to give up sacred values leads to emotional retrenchment—including anger, disgust and moral outrage—and heightened refusal to compromise or negotiate, (4) a rule-bound logic of moral appropriateness to do what is morally right no matter the likely risks or rewards, (5) brain-imaging patterns consistent with processing sacred values as rules rather than as calculations of costs and consequences, and with processing perceived violations of sacred values as emotionally agitating. Our interviews and experiments with leaders and networks of committed advocates (e.g., militants) in several cultural settings and conflict zones reveal strategies for how these values become widespread, entrenched and resistant to standard negotiation attempts at compromise. But our findings also show that culturally sensitive attempts to offer powerful symbolic gestures - such as a painful apology or sacrifice over one’s own sacred values - often increase flexibility towards compromise even among hardcore militants and radicals.

Intellectual and practical significance of findings

- Impact of findings for development of social science disciplines: In psychology, our research program on Sacred Values has strong implications for Construal Level Theory, Self-Concept Theory, Identity Fusion Theory, and Moral Foundations Theory. There are also several relevant cross-cutting themes: Temporal Management and Discounting, Norms versus Values, Essentialism, Parochial Altruism and Implications for Conflict (and Cooperation). For political science, international relations, anthropology, sociology

and law more generally, our research is leading us to develop a "Devoted Actor" Model of existential conflict, cooperation and decision making that is quite different from available "Rational Actor" models.

- Impact of findings for warfighters and policymakers: Our experimental and field studies integrate basic and applied research, combining brain imaging, laboratory and field experiments, surveys and interviews in order to provide “real-world” relevance for our warfighters and policymakers. Our results suggest that enduring political and advocacy groups re-frame and re-prioritize sacred values according to changing circumstances, especially in conditions of conflict . This allows these groups to maintain SVs as non-negotiable and absolute, even as the range of circumstances to which they can apply change. Understanding how this process plays out over time is a key to helping friends, thwarting enemies, and managing conflict. Such knowledge is aimed to help save lives, resources and national treasure, keeping our people, our war fighters, and our potential allies out of harm's way by affording them psychological knowledge of how culturally diverse individuals and groups advance values and interests that are potentially compatible or fundamentally antagonistic to our own.

Specific actions undertaken to implement the research:

- We have visited field sites in Guatemala, Chile and the Middle East to familiarize ourselves with local populations and governments and identify any problems that may arise in running experiments with human subjects.
- Structured sacred and instrumental differences into between-subjects and within-subjects experimental design.
- Ethics reviews have been conducted in all locations and IRB approval has been attained.
- Attained Human Subjects Approval for doing research on subjects in all four countries.
- Field research teams have been trained and have conducted data collection from open sources and human subjects. We also trained local research partners on techniques of within and between-subjects experimental design and how to embed these in structured interviews and mass surveys involving hundreds and thousands of people.
- Qualitative and quantitative analyses performed on data collected. \
- Theoretical and methodological training of foreign researchers, and forging interdisciplinary interactions in the field with US students and researchers to create a synergistic learning environment unavailable in traditional university research venues.

Country Descriptions

- Survey work performed in the Palestinian Territories. Structured interviews performed in Chile, Guatemala, Israel, and the United States.
- Collected survey data in Palestinian Territories, which demonstrated the relationship between sacred values and material values. The results address the issue of whether the negative effects of material incentives apply equally to gains (materially-enhanced) and losses (materially-lessened). The work also produced scientific findings that demonstrate a populations shift toward sacred values when the population perceives it is under threat (Atran, Ginges, 2012; Sheikh, Ginges, Coman, Atran, 2012).
- Performed elite interviews assessing whether symbolic concessions open the possibility for material compromises, as first suggested in a paper we published in *Science* (Atran, Axelrod, Davis, 2007) involving the attitudes of Middle East leaders to various tradeoffs for peace (Atran & Axelrod 2008, 2010; Ginges & Atran 2009; Ginges, Atran, Sachdeva & Medin, 2011). The hypothesis is that the negative effect of added material incentives for compromise over sacred values may be mitigated (or reversed) if these incentives involve a symbolic concession.
- Ground-truthed previous human subjects' data from Guatemala to test overall validity of psychological findings for predicting actual behavior, thus ensuring a solid theoretical and empirical base for experimental design.
- Collected value assessments, probed for mental models of the forest and elicit social and expert network data across two communities (Ladino and Itza' Maya) and across generations. Collected behavioral evidence (e.g. soil samples, etc.) to better understand the social and moral disturbances associated with modernization and inter-generational change.
- Collected and analyzed Cultural Stories in Chile and Guatemala, and administered experimentally designed questionnaires, to explore the judgment of participants in conflict as they view acts and intentions of out-group, particularly to understand the in-group moral and instrumental assessment of out-groups. Land and language emerged as the principal components of sacred values under conflict.

Conclusion

Despite some serious misgivings about the explanatory adequacy of theories of rational choice and utility in social and political life (see the complementary work of Nobel Prize winners Thomas Schelling and Danny Kahneman), until recently much more attention has focused on instrumental decision making than on morally motivated decision making. To be sure, over the last decade or so, there has been a surge in studies of moral decision making that focuses on universally mundane intuitions, beliefs, and behaviors about fairness and reciprocity. Yet, there has been surprising little research into that sense of “morality” that Darwin in *The Descent of*

Man associated with “the spirit of patriotism, fidelity, obedience, courage, and sympathy,” which enables human groups, from tribes to nations, to better cooperate in the competition with other groups for survival and dominance.

Especially in potentially violent situations of intergroup conflict, sacred values appear to drive collective actions independently, or all out of proportion, to evident or likely risks or results “because it is the right thing to do, whatever the costs or consequences.” Our research indicates that sacred values have privileged links to emotions and resist material trade-offs. The field-based studies reveal that using the standard approaches of business like negotiations in seemingly intractable conflicts, such as the Israel-Palestine dispute or the West’s standoff with Iran over its nuclear program, may only backfire, with material offers and sweeteners increasing resistance to negotiation and support for violence because they are interpreted as morally taboo and insulting (on par with accepting money to sell your child or sell out your country). But we also found that making symbolic concessions of no apparent material significance might help resolve such conflicts by first showing recognition, if not respect, for the other side’s core values. Doing so appears to increase support for compromise even among leaders and militants, reduce support for violence, and thereby open the possibility for negotiations over specific material issues and disputes.

Most current models of human cognition and behavior assume that the further down the line a goal is, the less its real value is here and now and the less committed a person is to implement the means to realize it. A new but still tentative line of research suggests that decisions about sacred values may show little or no discounting and even represent reverse discounting, with perceived psychological distance to temporally distant past or future events that are associated with sacred values shrinking or disappearing altogether. This may have important implications for how political leaders and militants manage to delay imposition and implementation of their values in order to meet the instrumental needs of people, without weakening -- and perhaps even strengthening -- popular belief in those values.

Future Research Directions

A key problem of motivating and sustaining collective action in the long run involves immunizing the group from individual defections. Monitoring and punishment of free riders and norm violators provides one set of means; however, a punishment regime is often costly to maintain and does little to eliminate inducements to defect that become attractive whenever and wherever vigilance is lax. Work on religious rhetoric and rituals suggest that these aspects of religion help to bind group members to long-term mutual commitments by internalizing religious beliefs into values adhered to through self-policing. Once internalized, such values appear to be less subject to the pressures and enticements of the here-and-now, such as the opinion of others and the lure of short-term goals and advantages. Accordingly, in future work we seek to test and confirm these conjectures beyond the purely religious realm, by providing preliminary evidence for three additional and complementary aspects of devoted actors driven by internalized sacred values, namely, resistance to: (1) social influence, (2) temporal discounting, and (3) exit strategies. We hypothesize that internalized sacred values should be less susceptible to social and temporal pressures than other socially, politically or morally important values and norms.

Moreover, sacred values should be relatively immune to personally beneficial inducements to tradeoff or give up those values, even if those inducements include implementation of other important values and norms. A successful demonstration of these ideas will also illuminate novel ways in which sacred values affect the decision making of devoted actors and prolong intergroup conflicts.

In future work with AFOSR we also plan to follow up our sacred values research with an exploration of the “Dynamics of Sacred Values and Social Responsibilities in Governance and Conflict Management.” Most successful political and advocacy (e.g., environmental) groups must manage strong commitment to core values with the pressing responsibilities of governance or and implementation of advocacy issues. Perceived compromise over core values can undermine popular legitimacy, but practical compromise may be necessary to ensure the economic and social welfare of the people. How, then, do such groups maintain values yet meet responsibilities over time?

Ever since Max Weber first posed this question as the fundamental moral and practical challenge for anyone having “a vocation for politics,” there has been relatively little systematic study or cumulative insight into a realistic answer. From the vantage of national and international security, few problems may be more pressing than understanding this dynamic as it relates, for example, to the future course of the Arab Spring and the rise to political power of the Muslim Brotherhood in Egypt. This was made clear to us by National Security Staff at our November 2012 White House briefing, focused on the implications of our theoretical and field research for potential developments in U.S. relations with Egypt and the wider region of the Middle East and North Africa (MENA). The theoretical and practical implications of the dynamic relationship between values and responsibilities potentially apply to a wide range of political and advocacy movements across the world, including in our own country.

High Level Briefings:

1. ARTIS research findings on sacred values and violent extremism presented by Lord John Alderdice to an Extremism Task Force Meeting in No 10 Downing Street – 17 July 2013, convened by British Prime Minister David Cameron.
2. S. Atran and R. Davis briefed the National Security Staff at the White House on “Managing MENA,” Nov. 8, 2012.
3. *Atran, S., Davis, R. participated in a high-level international meeting at the House of Lords on Water and Conflict in the Middle East.* Convened by Lord John Alderdice (UK) and Crown Prince Hassan (Jordan), November 12, 2012
4. Atran, S. (21 Jan 2011). “Should we be talking to the Taliban?” presented to the United Nations Al Qaeda-Taliban Monitoring Team at the Canadian Mission to the UN.
5. Atran, S. (9-10 Nov 2010). “The nature of the terrorist threat: Homegrown versus al-Qaeda.” Presented to the House of Lords at the invitation of Lord John Alderdice, Liberal

Democratic Chair, and Baroness Neville Jones, Minister of State for Security and Counter-Terrorism; summarized also in Address to the Royal Society for the Arts (RSA) and to the London School of Economics, London. <http://www.thersa.org/events/audio-and-past-events/2010/talking-to-the-enemy>;
<http://www2.lse.ac.uk/publicEvents/events/2010/20101109t1845vNT.aspx>.

6. Atran, S. (10 Mar 2010). "Pathways to and From Violent Extremism: The Case for Science-Based Field Research." Testimony before the Senate Armed Services Subcommittee on Emerging Threats & Capabilities. <http://armed-services.senate.gov/statemnt/2010/03%20March/Atran%2003-10-10.pdf>
7. Follow up responses to Senators questions (2010-2011):
www.jjay.cuny.edu/US_Senate_Hearing_on_Violent_Extremism.pdf

Books and Book Chapters:

1. Atran, S. War, Martyrdom, and Terror: Evolutionary Underpinnings of the Moral Imperative to Extreme Group Violence. In C. Roberts (ed.) Applied Evolutionary Psychology. Oxford: Oxford Higher Education, 2011.
2. Who Becomes a Terrorist Today? In C. Webel & J. Arnaldi (eds.) The ethics and efficacy of the global war on terrorism: Fighting terror with terror (twenty-first century perspectives on war, peace, and human conflict). Palgrave Macmillan, 2011.
3. Moral imperatives and democratic dynamics in the fight against AQAP in the context of the Arab Spring: Research policy and challenges. In A. Chapman & J. Adelman (Fall 2011) *Influencing violent extremist organization pilot effort: Focus on Al Qaeda in the Arabian Peninsula (AQAP)*, Strategic Multi-Layer Assessment Office (SMA), Dept. of Defense, Office of the Sec of Defense, 2011.
4. Psychological origins and cultural evolution of religion. In R. Sun (ed.) Grounding Social Sciences in Cognitive Science. Cambridge, MA: MIT Press, 2012.
5. The Power of Absurdity. In J. Brockman (ed.), This Explains Everything. New York, Harper Perennial, 2013, pp. 9-12.
6. Peacemaking in practice and theory (Northern Ireland and Israel-Palestine). In P. Antonello and P. Gifford (eds.), Can We Survive our Origins? Ann Arbor: University of Michigan Press, in press.
7. Ginges, J. & Atran, S. (2013). Sacred values and cultural conflict. In Gelfand, M. J., Chiu, C. Y., & Hong, Y. Y. (Eds.), Advances in Culture and Psychology (Vol. 4). New York: Oxford University Press.

8. Jassin, K., Argo, N., Obeid, N., & Sheikh, H, & Ginges, J. (in press). Negotiating cultural conflicts over sacred values. In. K. Sycara & M. J. Gelfand (Eds.), *Springer Advances in Group*.
9. Atran, S. (2011). Sacred Causes: War, Revolution, Resistance and Reconciliation. In A. Linklater ed. Politics and Ideology: The Engelsberg Seminar. Axel and Margaret Ax:son Foundation.
10. Atran, S. (2010) Talking to the Enemy: Violent Extremism, Sacred Values, and What it Means to Be Human. London: Penguin (Allen Lane); <http://www.amazon.co.uk/Talking-Enemy-Violent-Extremism-Sacred/dp/1846144124>.
11. Atran, S. (2010) Talking to the Enemy: Faith, Brotherhood, and the (Un)Making of Terrorists. New York: HarperCollins (Ecco press).
12. Atran, S., Arcadi, N., Ochsner ,K., Tobeña, A. & Vilarroya, O. eds. (2009). Values, empathy, and fairness across social barriers. New York: New York Academy of Sciences.

Journal Articles:

-IN PRESS/2013

1. Le Guen, O., Iliev, R., Lois, X., Atran, S., Medin, D. (in press). Garden Experiment Revisited: Inter-generational Changes in the Sacred and the Profane in Petén, Guatemala. *Journal of the Royal Anthropological Institute*.
2. Sheikh, H, Ginges, J. & Atran, S. (in press). Sacred values in intergroup conflict: Resistance to social influence, temporal discounting, and exit strategies. *Annals of the New York Academy of Sciences*.
3. Atran, S. (2013). From mutualism to moral transcendence. *Behavioral and Brain Sciences*. 36:81-82.
4. Sachdeva, S., Iliev, R. & Medin, D. (2013) Nonmutualistic morality. *Behavioral and Brain Sciences*, 36(1), 99-100.

2012

1. Atran, S. (2012). Parasite stress is not so critical to the history of religions or major group formations. *Behavioral and Brain Sciences*. 35:79-80.
2. Atran, S. (2012). Talking to the Enemy: An Alternative Approach to Ending Intractable Conflicts. *Solutions* 3:41-51.

3. Atran, S. & Ginges, J. (2012). Religious and sacred imperatives in human conflict. *Science*. 366:855-847.
4. Berns, G. & Atran, S. (2012). Biology of cultural conflict. *Philosophical Transactions of the Royal Society-B: Biological Sciences*. 367:633-639.
5. Berns, G., Bell, E., Capra, C.M., Prietula, M., Moore, S., Anderson, B., Ginges, J. & Atran S. (2012). The price of your soul: Neural evidence for the non-utilitarian representation of sacred values. *Philosophical Transactions of the Royal Society-B: Biological Sciences*. 367:754-762.
6. Blumstein, B., Atran, S., Field, S., Hoichberg, M, Johnson, D. Sagarin, R, Sosis, R. & Thayer, B. (2012). The peacock's tale: Lessons from evolution for effective signaling in international politics, *Clodynamics: The Journal of Theoretical and Mathematical History* 3:191-214.
7. Gong, H. & Medin, D. (2012). Construal levels and moral judgment: Some complications. *Judgment and Decision Making*, 7(5), 628-638.
8. Iliev, R., Sachdeva, S., & Medin, D. (2012) Moral kinematics: The role of physical factors in moral judgments. *Memory and Cognition*. 40 (8) Online. DOI 10.3758/s13421-012-0217-1
9. Sheikh, H., Ginges, J., Coman, A. & Atran, S. (2012). Religion, group threat, and sacred values. *Judgment and Decision Making*. 7:110-118.

2011

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<http://rspb.royalsocietypublishing.org/cgi/content/full/rspb.2010.2384?ijkey=l6GCdRvBXiTDPO6&keytype=ref>. <http://www.ncbi.nlm.nih.gov/pubmed/21325334>.
2. Ginges, J., Atran, S., Sachdeva, S., & Medin, D. (2011). Psychology out of the laboratory: The challenge of violent extremism. *American Psychologist*, 66, 5017-519.

2010

1. Atran, S. (2010). A Question of Honor: Why the Taliban Fight and What to Do About It. *Asian Journal of Social Science*. 38:341-361.
http://sitemaker.umich.edu/satran/files/atran_edit_ajss_038_03_03-atran_latest_.pdf.

2. Atran, S. (2010). Keystone Al Qaeda – un the battle against Al Qaeda, the only thing we have to fear is fear itself. Foreign Policy.
http://www.foreignpolicy.com/articles/2010/11/05/keystone_al_kaeda?page=full.
3. Atran, S., Axelrod, R. (July 2010). The Science of the sacred: A response to Professor Kamolnik. Perspectives on Terrorism. 4(3).
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4. Dehghani, M., Atran, S. Iliev, Sachdeva, R., Ginges J. & Medin, D. (2010). Sacred Values and Conflict Over Iran's Nuclear Program. Judgment and Decision Making. 5:540-546. <http://journal.sjdm.org/10/101203/jdm101203.pdf>.
5. Sagarin, R., Alcorta, C., Atran, S., et al. (2010). Decentralise, adapt and cooperate. Nature 465:292-293.
http://sitemaker.umich.edu/satran/files/nature_articlw_20_may2010_sagarin_alcorta_atran_et_al.pdf.

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1. Dehghani, M., Iliev, Sachdeva, R., Atran, S., Ginges, J. & Medin, D. (2009) Emerging sacred values: The Iranian nuclear program. Judgment and Decision Making. 4:990-993.
<http://journal.sjdm.org/91203/jdm91203.pdf>
2. Ginges, J. & Atran, S. (2009) What motivates participation in violent political action: Selective incentives or parochial altruism? *Annals of the New York Academy of Sciences* 1167: 115-123; <http://www.ncbi.nlm.nih.gov/pubmed/19580558>

Recent Academic Presentations:

1. Atran, S. *Religious Violence and Reconciliation*, Inaugural lecture, Abelson Reconciliation Lecture, University of Science and Arts of Oklahoma, February 2013:
<http://usao.edu/arr-stream>
2. Atran, S. *Issues in the Neurobiology of Sacred Values*. Department of Economics, Emory University, Atlanta, April 2013
3. Sachdeva, S. & Unsworth, S. (2013). Psychological Distance May Promote Conservation Behavior. Paper presented at the Annual Meeting of the Society for Personality and Social Psychology, New Orleans, LA.

4. Sheikh, H., & Ginges, J. (2013, January). Religious Ritual, Group Threat, and the Emergence of Sacred Values. Presented at the 13th Annual Meeting of the Society for Personality and Social Psychology, New Orleans, LA.
5. Atran, S. *Religious and sacred imperatives in human conflict*. Reducing Religious Conflict,” Oxford University, June 2012; <http://podcasts.ox.ac.uk/people/scott-atran>
6. Atran, S. *Religion and the Sacred*. William J. Lonner Distinguished Lecture. 21st International Conference International Association for Cross-Cultural Psychology, Stellenbosch, South Africa, July 2012.
7. Atran, S. *Male martyrdom networks*. Foundation for Male Studies, New York, October 2012.
8. Atran, S. *Managing values and responsibilities*. “Neuroethics: from Lab to Law. A Scientific Scrutiny of Sociability, Responsibility and Criminality.” International Center for Scientific Debate. Barcelona, November, 2012.
9. Atran, S. *Round Table at the House of Lords on Water and Conflict in the Middle East*. Convened by Lord John Alderdice (UK) and Crown Prince Hassan (Jordan), November 2012
10. Atran, S. *The science of the sacred and seemingly intractable conflicts*. Conference in honor of Dan Sperber. Paris, December 2012.
11. Ginges, J. & Sheikh, H. (2012, October). Sacred Values and Intergroup Violence. Presented at the Meeting of the Society of Experimental Social Psychology, Austin, TX.
12. Iliev, R. (2012) The role of culture in causal reasoning. University of Bielefeld, Germany
13. Sachdeva, S. (2012). The Norm of Self-Sacrifice. Paper presented at the Annual Meeting of the Society for Anthropological Science, Las Vegas, NV.
14. Sheikh, H., & Ginges, J. (2012, June). Conflict and Group Identities: The Emergence of Sacred Values in the Context of Intergroup Conflict. Presented at the 14th Jena Workshop on Intergroup Processes, Jena, Germany.
15. Sheikh, H., & Ginges, J. (2012, May). Religious Ritual Leads to the Emergence of Sacred Values. Presented at the 24th Annual Convention of the Associations for Psychological Science, Chicago, MI.
16. Sheikh, H., & Ginges, J. (2012, January). Collective Religious Ritual and Parochial Altruism. Presented at the 12th Annual Meeting of the Society for Personality and Social Psychology, San Diego, CA.

ADDITIONAL PUBLIC OUTREACH

Press Articles/Opinion Pieces:

1. Black and White and Red All Over: How the Hyperkinetic Media is Breeding a New Generation of Terrorists, *Foreign Policy*, April 2013;
http://www.foreignpolicy.com/articles/2013/04/22/black_and_white_and_red_all_over_boston_bombing_terrorists_media
2. God and the Ivory Tower. *Foreign Policy*, August 2012;
http://www.foreignpolicy.com/articles/2012/08/06/god_and_the_ivory_tower
3. S. Atran. (22 May 2012) *Science and Religion Today*. “How Can a Better Understanding of Sacred Values Help Us Resolve Intergroup Conflicts?”;
<http://www.scienceandreligiontoday.com/2012/05/22/how-can-a-better-understanding-of-sacred-values-help-us-resolve-intergroup-conflicts/>
4. S. Atran. (5 May 2012) *Huffington Post*. “What’s really the matter with Kansas and Cairo?”; http://www.huffingtonpost.com/scott-atran/whats-really-the-matter-w_b_1492120.html
5. S. Atran. (17 May 2012) *Huffington Post*. “Religion is a potent force for ingroup cooperation and outgroup conflict, *Science* article maintains”;
http://www.huffingtonpost.com/scott-atran/religion-human-conflict_b_1526177.html
6. Social Warfare, *Foreign Policy*, March 2012;
http://www.foreignpolicy.com/articles/2013/03/15/social_warfare_budget_republicans
7. S. Atran. (3 Feb 2011). *New York Times and International Herald Tribune*. “Egypt’s Bumbling Brotherhood.” Op-ed.
<http://www.nytimes.com/2011/02/03/opinion/03atran.html>
8. S. Atran. (2 Feb 2011). *The National Interest*. “Calling the Muslim Brotherhood,” field report. <http://nationalinterest.org/commentary/calling-the-muslim-brotherhood-4816>.
9. S. Atran. (29 Nov 2010). *The Guardian*. “The Taliban’s ex-pat jihadists.”
<http://www.guardian.co.uk/commentisfree/belief/2010/nov/29/taliban-army-expat-jihadists>.
10. S. Atran. (5 Nov 2010) *Foreign Policy*. “Keystone Al-Kaeda: In the Battle Against Al Qaeda, the Only Thing We Have to Fear is Fear Itself”;
http://www.foreignpolicy.com/articles/2010/11/05/keystone_al_kaeda

11. S. Atran. (27 Oct 2010). *New York Times and International Herald Tribune* "Turning the Tide Against Al Qaeda." Op-ed.
<http://www.nytimes.com/2010/10/27/opinion/27atran.html>
12. S. Atran & R. Axelrod. (30 June 2010). *New York Times and International Herald Tribune* "Why We Talk to Terrorists."
<http://www.nytimes.com/2010/06/30/opinion/30atran.html>.
13. *Cultural Heritage and Arts Review* ("Q & A with Cultural Anthropologist Scott Atran," The American Society of International Law, Vol. 1, issue 1, June 2010);
<http://www.asil.org/files/60/misc/CHARReviewI.pdf>
14. S. Atran. (13 Dec 2009). *New York Times and International Herald Tribune*. "To Beat Al Qaeda, Look to the East." Op-ed. "Week in Review."
<http://www.nytimes.com/2009/12/13/opinion/13atran.html>
15. S. Atran & J. Ginges (25 Jan 2009). *New York Times and International Herald Tribune*. "How Words Could End a War." Op-ed, "Week in Review."
http://www.nytimes.com/2009/01/25/opinion/25atran.html?_r=2&pagewanted=all

Press Articles about Research:

1. *Scientific American* ("The Five Myths of Terrorism," by M. Shermer, 19 July 2013)
<http://www.scientificamerican.com/article.cfm?id=five-myths-of-terrorism-including-that-it-works>
2. - *Nature* ("Social Evolution: The Ritual Animal," by D. Jones, 23 January 2013);
<http://www.nature.com/news/social-evolution-the-ritual-animal-1.12256>
3. - *The Chronicle of Higher Education* ("Dusting off God," by T. Bartlett, 13 Aug 2012);
<http://chronicle.com/article/Does-Religion-Really-Poison/133457/>
4. - *The Daily Beast* ("Studying the sacred," by M. Simon, 12 Aug 2012);
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